

REMARKS

Claims 1, 3, 9-10, 18, and 20 are amended. Claims 7-8, 16-17, and 24-25 are cancelled without prejudice or disclaimer. Claims 1-5, 9-14, and 18-22 remain for consideration. All claims are allowable over the cited art.

The Office Action fails to establish that Claims 1 and 10 are anticipated under 35 U.S.C. §102(b) by U.S. Patent No. 5,493,246 to Anderson.

Applicant has, nevertheless, amended Claims 1 and 10 in order to advance prosecution. In particular, claim 1 is amended to set forth at least "a feed-forward control module [that is] coupled to the feed-forward circuit to adaptively alter a property of said feed-forward circuit based on at least one characteristic of the transmission line." Anderson, however, does not teach such a limitation. Rather, Anderson teaches that the functions provided by impedance blocks 12, 18, 22, and 24 are not adaptively selected by a feed-forward control module, but are instead predetermined and manually selected by a user. (See column 2, lines 6-9; column 5, lines 22-26). Applicant's claim 10 has been similarly amended. Applicant respectfully submits, therefore, that Claims 1 and 10 patentably distinguish over Anderson and are in condition for allowance.

The Office Action fails to establish that Claims 2-3, 7-9, 11-12, and 16-17 are unpatentable over Anderson in view of U.S. Patent No. 4,686,686 to Nakayama et al (hereinafter "Nakayama") under 35 U.S.C. § 103(a). The rejection of Claims 7-8 and 16-17 is moot in view of the cancellation of Claims 7-8 and 16-17.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (See MPEP § 2142).

Concerning the third criteria which must be met to establish *prima facie* obviousness of a claimed invention, the combination of Anderson and Nakayama must be shown to teach or suggest all of Applicant's claimed limitations. In regard to Applicant's Claims 1 and 10 as discussed above, however, Anderson teaches that the functions provided by impedance blocks 12, 18, 22, and 24 are not adaptively selected by a feed-forward control module, but are instead predetermined and manually selected by a user, which is in contradistinction to Applicant's Claims 1 and 10.

Furthermore, Applicant's claim 1 is amended to set forth at least that an amplifier has "an input [that is] continuously coupled to receive an input signal" and Applicant's claim 10 is amended to set forth at least "an amplifier having an input continuously coupled to the output of the data processing module." Nakayama, on the other hand, is unable to maintain a continuous connection at the input of amplifier 30, since switch 20 seems to be alternatingly opened and closed in response to clock pulse ϕ_2 (see FIG. 2 and column 2 line 68 to column 3 line 6), which is in contradistinction to Applicant's Claims 1 and 10.

Combining Nakayama with Anderson in order to remedy such a deficiency also fails with respect to the first criteria, which must be met to establish *prima facie* obviousness of a claimed invention. "If the proposed modification or combination of the prior would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." (See M.P.E.P. § 2143.01 VI). Assuming *arguendo* that the Office Action were to suggest that Nakayama's alternating connection to amplifier 30, as facilitated by switch 20, were to be modified with the continuous input connection to amplifier 14 of Anderson, then it would impermissibly change the operation of Nakayama. In particular, Nakayama teaches that "switches 16-21 serve to sample the input signal IN in a known manner." (See column 3, lines 6-8). Thus, modifying Nakayama with Anderson would seemingly prohibit Nakayama from sampling the input signal in a known manner in violation of M.P.E.P. § 2143.01 VI.

Since the combination of Anderson and Nakayama apparently fails to establish a *prima facie* case of obviousness with respect to Applicant's Claims 1 and 10, it follows that the combination of Anderson and Nakayama similarly fails with respect to

the dependent Claims of Claims 1 and 10. In particular, dependent Claims 2-3, 9, and 11-12 include all of the limitations of Claims 1 and 10, respectively, and recite additional features which further distinguish these claims from the combination of Anderson and Nakayama. Applicant respectfully submits, therefore, that Claims 2-3, 9, and 11-12 patentably distinguish over the combination of Anderson and Nakayama and are in condition for allowance.

The Office Action fails to establish that Claims 4-5 and 13-14 are unpatentable over Anderson in view of U.S. Patent No. 3,886,470 to O'Neil et al (hereinafter "O'Neil") under 35 U.S.C. § 103(a).

Concerning the third criteria which must be met to establish *prima facie* obviousness of a claimed invention, the combination of Anderson with O'Neil must be shown to teach or suggest all of Applicant's claimed limitations. However, O'Neil has not been shown to remedy Anderson's deficiencies in regard to the absence of "a feed-forward control module coupled to the feed-forward circuit to adaptively alter a property of said feed-forward circuit based on at least one characteristic of a transmission line" as set forth in Applicant's claim 1. A similar limitation is also set forth in Applicant's claim 10.

Furthermore, combining the teachings of Anderson with any other reference apparently precludes the existence of a feed-forward control module, and instead, apparently requires that the feed-forward circuit be manually altered in a predetermined fashion, as is apparently taught in Anderson as discussed above. Thus, combining Anderson with O'Neil, or any other reference, to obtain a correspondence to Applicant's Claims 1 and 10 is violative of the third criteria for establishing *prima facie* obviousness of Applicant's Claims 1 and 10. It further follows that the combination of Anderson and O'Neil fails with respect to dependent Claims 4-5 and 13-14, which include all of the limitations of Claims 1 and 10, respectively, and recite additional features which further distinguish these claims from the combination of Anderson and O'Neil. Applicant respectfully submits, therefore, that Claims 4-5 and 13-14 patentably distinguish over the combination of Anderson and O'Neil and are in condition for allowance.

The Office Action fails to establish that claim 18 is unpatentable over Anderson in view of U.S. Patent No. 3,939,437 to Adam under 35 U.S.C. § 103(a).

Applicant has, however, amended claim 18 in order to advance prosecution. In particular, claim 18 is amended to set forth at least "a feed-forward control module coupled to the feed-forward circuit to adaptively select a capacitance value of said feed-forward circuit based on at least one characteristic of said printed circuit board to which said first device is electrically coupled." As discussed above, combining the teachings of Anderson with Adam, or any other reference, apparently precludes the existence of a feed-forward control module, and instead, apparently requires that the feed-forward circuit be manually altered in a predetermined fashion. Thus, combining Anderson with Adam is violative of the third criteria for establishing *prima facie* obviousness of Applicant's claim 18. Applicant respectfully submits, therefore, that claim 18 patentably distinguishes over the combination of Anderson and Adam and is in condition for allowance.

The Office Action fails to establish that Claims 19-20 and 24-25 are unpatentable over Anderson in view of Adam and further in view of Nakayama under 35 U.S.C. § 103(a). The rejection of Claims 24-25 is moot in view of the cancellation of Claims 24-25.

As discussed above, combining the teachings of Anderson with Adam and Nakayama, or any other reference, apparently precludes the existence of a feed-forward control module, and instead, apparently requires that the feed-forward circuit be manually altered in a predetermined fashion. Thus, combining Anderson with Adam and Nakayama is violative of the third criteria for establishing *prima facie* obviousness of Applicant's claim 18. It further follows that the combination of Anderson with Adam and Nakayama fails with respect to dependent Claims 19-20, which include all of the limitations of claim 18 and recite additional features which further distinguish these claims from the combination of Anderson with Adam and Nakayama. Applicant respectfully submits, therefore, that Claims 19-20 patentably distinguish over the combination of Anderson with Adam and Nakayama and are in condition for allowance.

The Office Action fails to establish that Claims 21-22 are unpatentable over Anderson in view of Adam and further in view of O'Neil under 35 U.S.C. § 103(a).

As discussed above, combining the teachings of Anderson with Adam and O'Neil, or any other reference, apparently precludes the existence of a feed-forward control module, and instead, apparently requires that the feed-forward circuit be manually altered in a predetermined fashion. Thus, combining Anderson with Adam and O'Neil is violative of the third criteria for establishing *prima facie* obviousness of Applicant's claim 18. It further follows that the combination of Anderson with Adam and O'Neil fails with respect to dependent Claims 21-22, which include all of the limitations of claim 18 and recite additional features which further distinguish these claims from the combination of Anderson with Adam and O'Neil. Applicant respectfully submits, therefore, that Claims 21-22 patentably distinguish over the combination of Anderson with Adam and O'Neil and are in condition for allowance.

CONCLUSION

Reconsideration and a notice of allowance are respectfully requested in view of the amendments and remarks presented above. If the Examiner has any questions or concerns, a telephone call to the undersigned is invited.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on January 25, 2007.

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